

Appl. No. 09/932,236

Cancel claims 5, 11, 12 and 15-23.

B¹

1. (Amended) A method of forming a metal-comprising mass for a semiconductor construction, comprising:

- providing a semiconductor substrate;
- providing one or more metallo-organic precursors proximate the substrate, at least one of the one or more precursors not comprising platinum, and the one or more precursors comprising one or more of rhodium, iridium, cobalt, palladium and nickel;
- C
- exposing the one or more precursors to a reducing atmosphere to release metal from the one or more precursors, the reducing atmosphere comprising one or both of plasma-activated hydrogen and H₂, the released metal consisting essentially of one or more of rhodium, iridium, cobalt, palladium and nickel; and
- depositing the released metal over the semiconductor substrate to form a metal-comprising mass on the semiconductor substrate.

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SUB C1
cont
B1

2. (Amended) A method of forming a metal-comprising mass for a semiconductor construction, comprising:

- providing a semiconductor substrate;
- providing one or more metallo-organic precursors proximate the substrate, at least one of the one or more precursors not comprising platinum;
- exposing the one or more precursors to a reducing atmosphere to release metal from the one or more precursors;
- depositing the released metal over the semiconductor substrate to form a metal-comprising mass on the semiconductor substrate; and
- wherein the substrate comprises an upper surface consisting of one or more of TiN, elemental Ti, WN, elemental W, TaN and elemental Ta; and the upper surface is exposed to the reducing atmosphere during formation of the metal-comprising mass.

B2

4. (Amended) The method of claim 2 wherein the metal-comprising mass is formed physically against the upper surface of the substrate.

B3 SUB C2

13. (Amended) The method of claim 1 wherein the reducing atmosphere comprises plasma-activated hydrogen.

B4

42. (New) The method of claim 2 wherein the upper surface consists of TiN.

43. (New) The method of claim 2 wherein the upper surface consists of elemental Ti.

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44. (New) The method of claim 2 wherein the upper surface consists of WN.

45. (New) The method of claim 2 wherein the upper surface consists of elemental W.

46. (New) The method of claim 2 wherein the upper surface consists of TaN.

47. (New) The method of claim 2 wherein the upper surface consists of elemental Ta.